

# NASA TECH BRIEF

## *Goddard Space Flight Center*



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### GPEDIT

#### The problem:

There is a general need to detect and eliminate or correct data records which are out-of-format. Incorrectly formatted data can cause premature termination of FORTRAN programs. Bad input can cause useless output or may result in an excessive amount of processing to correct.

#### The solution:

GPEDIT compares each character in a data record to the corresponding character in a mask provided by the user. The mask indicates that an alphabetic or numeric character is allowed or that a blank or punctuation mark is anticipated. The mask can also indicate that any data character other than some invalid character, is allowed. If no editing of certain characters is desired, this can be indicated. No analysis of numerical values, or editing of alphabetic text is possible in GPEDIT.

#### How it's done:

This program analyzes each data record and constructs a coded data string, using the same characters that may appear in the mask. This coded data string is then matched with the mask. If any symbol in the test line does not conform to the corresponding mask symbol, a return code is set not equal to zero and control returns to the calling routines. If all characters tested

fit the format, the return code is set equal to zero and control returns to the calling routine.

The length of the data record to be edited cannot exceed eighty characters. If the initial length of a line exceeds 80, or is equal to 0, the return code will be set to a non-zero value and control will return. If the size is to be increased, the source deck must be changed.

#### Notes:

1. GPEDIT is written in assembly language for the 360 under OS/360. It requires 2BA<sub>16</sub> bytes of memory not including system library routines. The time required to check an 80-character line is extremely small.
2. Inquiries concerning this program should be directed to:

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Reference: GSC-11308

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